



⑪ Publication number: **0 517 075 A1**

12

EUROPEAN PATENT APPLICATION

②¹ Application number: 92108883.7

⑤ Int. Cl.⁵: **A61M 25/00**

② Date of filing: 26.05.92

③ Priority: 06.06.91 US 711045

④3 Date of publication of application:
09.12.92 Bulletin 92/50

⑧ Designated Contracting States:
CH DE FR GB IT LI NL

(71) Applicant: **ADVANCED CARDIOVASCULAR
SYSTEMS, INC.**
3200 Lakeside Drive
Santa Clara California 95052(US)

⑦ Inventor: Macaulay, Patrick E.
7424 Rainbow

Cupertino, CA 95014(US)
Inventor: Wasicek, Lawrence D.
526 East Evelyn Avenue
Sunnyvale, CA 94086(US)
Inventor: Bayot, Alfredo
6234 Cedar Blvd.
Newark City, CA 94560(US)
Inventor: Klemm, Kurt
3431 Laguna Court
Santa Clara, CA 95051(US)

74 Representative: Baillie, Iain Cameron et al
Ladas & Parry Alzheimer Eck 2
W-8000 München 2(DE)

54 Intravascular catheter with a nontraumatic distal tip.

57 An intravascular catheter such as a guiding catheter of composite construction having a nontraumatic distal tip comprising a proximal elastomeric tubular element (12) and a distal elastomeric tubular element (13) formed of softer material than the proximal section. The proximal tubular section (17) of the distal tip preferably has a radiopaque material incorporated therein to enable the distal tip to be fluoroscopically observable when in place within a patient. The shaft (11) of the catheter, which exhibits excellent torquability and pushability, is formed with a very thin wall. The catheter shaft includes an inner tubular member (21) of braided polymeric fibrous strands impregnated with a thermoset polyurethane and having an outer jacket (22) or coating of thermoplastic polyurethane secured to the braided tubular member. In some embodiments it is preferred to include a lubricious liner (28) within the braided tubular member.

